# Audit of Timber Harvesting, Road Construction, Maintenance and Deactivation

## Sigurdson Bros. Logging Company Ltd.

## Non-Replaceable Forest Licence A73558


**FPB/ARC/97**
**February 2008**

# Table of Contents

# Board Commentary

In Fall 2007, the Forest Practices Board conducted a limited scope compliance audit of Sigurdson Bros. Logging Company Ltd. Sigurdson holds a non-replaceable forest licence A73558 to harvest 150,000 cubic metres of timber annually. The licence was created to address the harvest of timber infested with mountain pine beetle within the Chilcotin Forest District (see map on page 2).

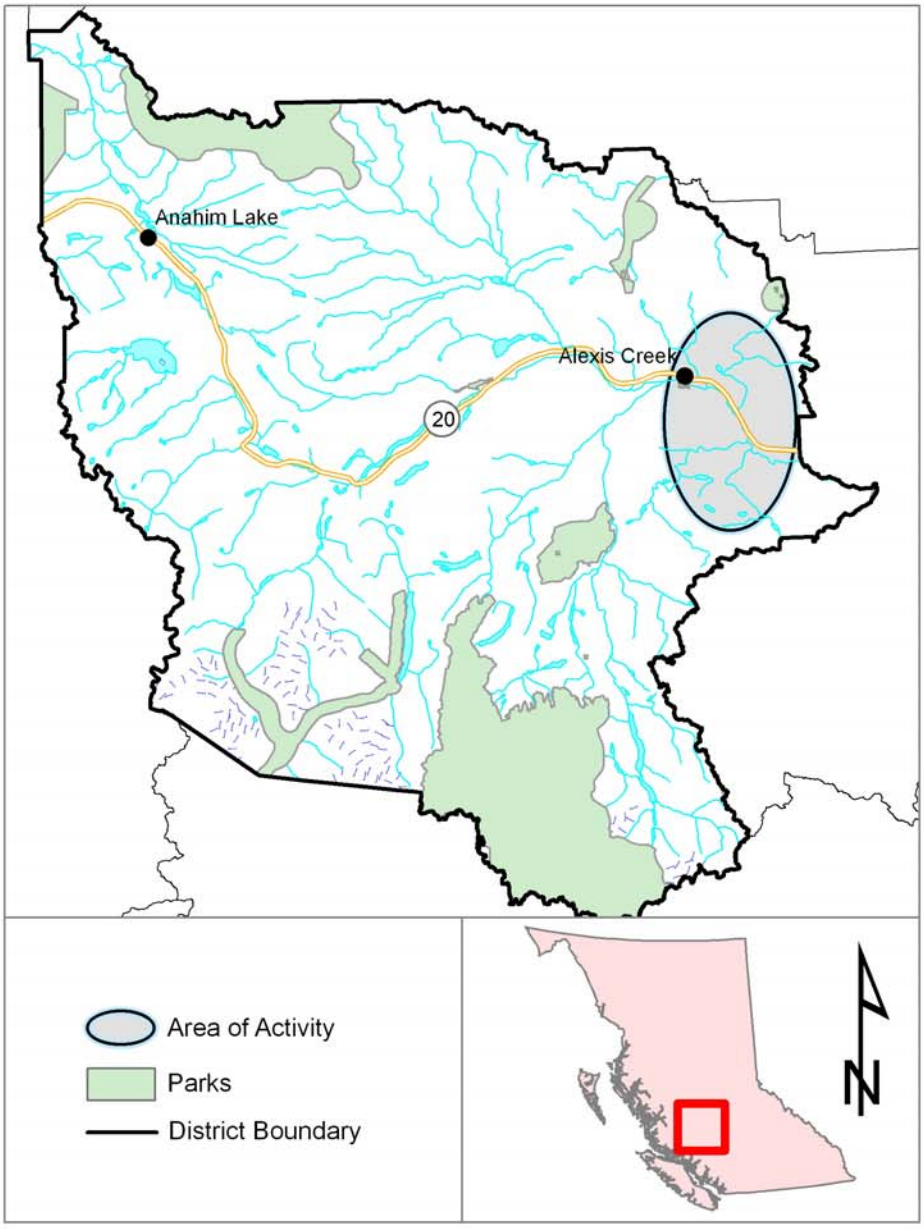
The mountain pine beetle epidemic continues in the BC interior, including the area audited. In response to this epidemic, Sigurdson has focused its harvesting activities on the salvage of infested stands.

The audit found that harvesting, road activities and associated planning undertaken by Sigurdson complied with legislative requirements in all significant respects.

However, the audit identified three instances of excessive soil disturbance levels in Sigurdson's harvested areas. These practices are not widespread, however they are avoidable.

The Board encourages Sigurdson to take greater care when operating in areas that may have wet soil conditions.

Chilcotin Forest District
Limited Scope Audit
Sigurdson Bros. Logging Company - NRFL A73558



# Audit Results

## Background

As part of the Forest Practices Board's 2007 compliance audit program, the Board selected two non-replaceable forest licences (NRFL) in the Chilcotin Forest District for audit. This audit report is for non-replaceable forest licence A73558, held by Sigurdson Bros. Logging Company Ltd. (Sigurdson).

The Board randomly selected the Chilcotin Forest District for a limited scope audit in 2007. Sigurdson was selected as one of the largest active NRFLs in the forest district, and not on the basis of location or past performance. Information about the Board's compliance audit process is provided in Appendix 1.

Under NRFL A73558, the provincial government committed 150,000 cubic metres per year of timber to Sigurdson for the purpose of harvesting stands infected by mountain pine beetle.

**Sigurdson cutblock east of Alexis Creek.**

The Board's audit fieldwork took place on October 9, 2007.

### Higher Level Plans[1]

The Cariboo-Chilcotin Land-Use Plan (CCLUP) is applicable to forest agreement holders' operations. Parts of the CCLUP were declared a "higher level plan" under the Forest Practices Code, requiring operations to be consistent with those portions of the CCLUP. Other portions of the CCLUP provide broad operational guidance for forest practices in the plan area.

## Audit Approach and Scope

The Board conducted a "limited scope" audit in which only harvesting, road activities and associated planning were examined. Harvesting and road activities that took place between October 1, 2006, and October 9, 2007, were included in the scope of the audit. These activities were assessed for compliance with the *Forest Practices Code of British Columbia Act* (the Code), the *Forest and Range Practices Act* (FRPA),[2] and related regulations.

The Board's audit reference manual, *Compliance Audit Reference Manual, Version 6.0, May 2003,* and the addendum to the manual for the 2007 audit season, set out the standards and procedures that guided the audit process.

## Planning and Practices Examined

### Planning

The CCLUP contains predominantly landscape level requirements which fall outside the scope of this audit. The audit did not identify any CCLUP site level requirements for the blocks and roads subject to audit.

Sigurdson conducted activities during the audit period under its 2004 to 2005 Forest Development Plan (FDP).[3] The plan has been amended a number of times since it was approved. Site level plans were examined to determine consistency with FDP objectives. Harvest and road activities were examined for compliance with site level plans.

### Harvesting

Sigurdson harvested 36 cutblocks (2,036 hectares) during the audit period. The Board audited all of the cutblocks.

### Roads

The Board audited all 80.8 kilometres of new road construction, all 22.5 kilometres of road maintenance, and the one bridge maintained by Sigurdson.

Sigurdson did not deactivate any road, or construct any bridges during the audit period.

## Findings

The audit found that the planning and field activities undertaken by Sigurdson on NRFL A73558 complied in all significant respects with the requirements of the Code, FRPA and related regulations, as of October 2007.

### Soil Disturbance

Soil disturbance is disturbance to the soil in the net area to be reforested resulting from the construction of temporary access structures, or gouges, ruts, scalps or compacted areas resulting from forestry activities. Without rehabilitation, disturbed sites often have reduced soil productivity and may not provide optimum growing conditions for new trees. For that reason, maximum allowable amounts of soil disturbance are set in regulation.

Three Sigurdson cutblocks (ranging in size from 50 to 120 hectares) harvested during the audit period contained areas with excessive dispersed soil disturbance, likely a result of operating

machinery during periods of wet soil conditions. In all three cutblocks, the maximum soil disturbance objective of 10 percent was exceeded in portions ranging in size from two to seven hectares. These practices comply with the Code, since in each instance the 10 percent disturbance limit was not exceeded when averaged over the entire block (standards unit). However, this type of disturbance is avoidable by confining the timing of harvesting activities to periods of lower soil moisture. Therefore, this is a practice that requires improvement.

## Audit Opinion

In my opinion, the timber harvesting; road construction and maintenance; and the associated operational planning carried out by Sigurdson Bros. Logging Company Ltd. on non-replaceable forest licence A73558, respectively, for the period October 1, 2006, to October 9, 2007, complied in all significant respects with the requirements of the Code, FRPA and related regulations, as of October 2007. No opinion is provided regarding road deactivation activities.

In reference to compliance, the term "in all significant respects" recognizes that there may be minor instances of non-compliance that either may not be detected by the audit, or are detected but not considered worthy of inclusion in the audit report.

Without qualifying my opinion, I draw attention to the *Soil Disturbance* section of this report, which describes harvesting practices that resulted in excessive soil disturbance and require improvement.

The *Audit Approach and Scope* and the *Planning and Practices Examined* sections of this report describe the basis of the audit work performed in reaching the above conclusion. The audit was conducted in accordance with the auditing standards of the Forest Practices Board. Such an audit includes examining sufficient forest planning and practices to support an overall evaluation of compliance with the Code and FRPA.

C R Mosher

Christopher R. Mosher CA, CEA (SFM)
Director, Audits

February 18, 2008

# Appendix 1:
# Forest Practices Board Compliance Audit Process

## Background

The Forest Practices Board conducts audits of government and agreement-holders under the *Forest and Range Practices Act* (FRPA), section 122, and the *Wildfire Act* (WA). Compliance audits examine forest or range planning and practices to determine whether or not they meet FRPA and / or WA requirements. (The transitional provisions of FRPA state that the Code continues to apply to forest practices carried out under a forest development plan, until there is an approved forest or range stewardship plan, at which point the requirements of FRPA apply.)

### Selection of auditees

The Board conducts about eight or nine compliance audits annually. Most of these are audits of agreement holders. The Board also audits the government's BC Timber Sales Program (BCTS). This section describes the process for selecting agreement holders to audit.

To begin with, auditors randomly select an area of the Province, such as a forest district. Then the auditors review the forest resources, geographic features, operating conditions and other factors in the area selected. These are considered in conjunction with Board strategic priorities (updated annually), and the type of audit is determined. At this stage, we choose the auditee(s) that best suits the selected risk and priorities. The audit selections are not based on past performance.

For example, in 2007, the Board randomly selected the Robson Valley Timber Supply Area as a location for an audit. After assessing the activities within that area, we discovered that two licensees had recently closed operations due to financial problems. As the Board has expressed concern in the past about financially strapped companies failing to meet outstanding obligations, such as reforestation, and road maintenance, the audit focused on the status of the outstanding obligations of these two licences.

For BCTS audits, a forest district within one of the 12 business areas within the province is selected randomly for audit.

## Audit Standards

Audits by the Board are conducted in accordance with the auditing standards developed by the Board. These standards are consistent with generally accepted auditing standards. The standards for compliance audits are described in the Board's *Compliance Audit Reference Manual*.

## Audit Process

### Conducting the Audit

Once the Board randomly selects an area or district and determines the scope of audit to be conducted and the licensee(s) to be audited, all activities carried out during the period subject to audit are identified (such as harvesting or replanting, and road construction or deactivation activities). Items that make up each forest activity are referred to as a population. For example, all sites harvested form the timber harvesting population and all road sections constructed form the road construction population.

A separate sample is then selected for each population (e.g., the cutblocks selected for auditing timber harvesting). Within each population, more audit effort (i.e., more audit sampling) is allocated to areas where the risk of non-compliance is greater.

Audit field work includes assessments of features using helicopters as well as ground procedures, such as measuring specific features like riparian reserve zone width. The audit teams generally spend one to two weeks in the field.

### Evaluating the Results

The Board recognizes that compliance with the many requirements of the Code, FRPA and WA, is more a matter of degree than absolute adherence. Determining compliance, and assessing the significance of non-compliance, requires the exercise of professional judgment within the direction provided by the Board.

The audit team, composed of professionals and technical experts, first determines whether forest practices comply with legislated requirements. For those practices considered to not be in compliance, the audit team then evaluates the significance of the non-compliance, based on a number of criteria, including the magnitude of the event, the frequency of its occurrence and the severity of the consequences.

Auditors categorize their findings into the following levels of compliance:

***Compliance*** – where the auditor finds that practices meet Code, FRPA and WA requirements.

***Not significant non-compliance*** – where the auditor, upon reaching a non-compliance conclusion, determines that one or more non-compliance event(s) is not significant and not worthy of reporting. Therefore, this category of events will not be included in audit reports.

***Significant non-compliance*** – where the auditor determines a non-compliance event(s) or condition(s) is or has the potential to be significant, and is considered worthy of reporting.

***Significant breach*** – where the auditor finds that significant harm has occurred, or is beginning to occur, to persons or the environment as a result of one or many non-compliance events.

If it is determined that a significant breach has occurred, the auditor is required by the *Forest Practices Board Regulation* to immediately advise the Board, the party being audited, and the Minister of Forests and Range.

## Reporting

Based on the above evaluation, the auditor then prepares a draft audit report. The party being audited is given a draft of the report for review and comment before it is submitted to the Board.

Once the auditor submits the draft report, the Board reviews it and determines if the audit findings may adversely affect any party or person. If so, the party or person must be given an opportunity to make representations before the Board decides the matter and issues a final report. The representations allow parties that may potentially be adversely affected to present their views to the Board.

The Board then reviews the auditor's draft report and the representations from parties that may potentially be adversely affected before preparing its final report. Once the representations have been completed, the report is finalized and released: first to the auditee and then to the public and government.

---

[1] A higher level plan is a forest resource management objective that is established as legally binding by a written order. The objective applies to a resource management zone, landscape unit, sensitive area, recreation site, recreation trail, or interpretive forest site. Higher level plans are a provision of the *Forest Practices Code of British Columbia Act* that give direction to operational plans.

[2] Most of the *Forest Practices Code of British Columbia Act* (the Code) was repealed on January 31, 2004, and replaced with the *Forest and Range Practices Act* (FRPA). The transitional provisions of FRPA state that the Code continues to apply to forest practices carried out under a forest development plan. This continues until there is an approved forest stewardship plan, at which point, the requirements of FRPA apply. Therefore, although FRPA came into effect prior to the audit period, the legislated forest practices requirements that applied to the auditee were the requirements of the Code.

[3] A forest development plan is an operational plan that provides the public and government agencies with information about the location of proposed roads and cutblocks for harvesting timber over a period of at least five years. The plan must specify measures that will be carried out to protect certain forest resources prescribed by regulation. It must also be consistent with any higher level plans. Site specific plans are required to be consistent with the forest development plan.

Forest Practices Board

Mailing Address:
P.O. Box 9905, Stn Prov Gov't
Victoria, British Columbia
Canada V8W 9R1

Location:
3rd Floor, 1675 Douglas St., Victoria
http://www.fpb.gov.bc.ca

NEWS release

**For Immediate Release**
**February 27, 2008**

# Sigurdson Bros. gets clean audit

VICTORIA – A limited scope audit, in which harvesting, road activities and associated planning were examined, has found good forest practices by Sigurdson Bros. Logging Company Ltd., according to a Forest Practices Board report released today.

Sigurdson's licence allows it to harvest 150,000 cubic metres of pine-beetle-killed timber per year. The licence is located in the vicinity of Alexis Creek in the Chilcotin Forest District.

"Generally speaking, Sigurdson has demonstrated good practices on the ground," said board chair Bruce Fraser. "However, the audit identified three instances of excessive soil disturbance levels in Sigurdson's harvested areas. These practices are not widespread, but they are avoidable."

The audit of Sigurdson's non-replaceable forest licence A73558 was completed in October 2007. Harvesting and road activities that took place between Oct. 1, 2006 and Oct. 9, 2007 were included in the scope of the audit.

The Forest Practices Board is an independent public watchdog that reports to the public about compliance with the Forest and Range Practices Act (FRPA) and the achievement of its intent. The board's main roles under FRPA are:

- Auditing forest practices of government and licence holders on public lands.
- Auditing government enforcement of FRPA.
- Investigating public complaints.
- Undertaking special investigations of forestry issues.
- Participating in administrative appeals.
- Providing reports on board activities, findings and recommendations.

-30-

**This news release and more information about the board are available on the Forest Practices Board website at www.fpb.gov.bc.ca or by contacting:**

**Helen Davies, Communications**
Forest Practices Board
Phone: 250 356-1586 / 1 800 994-5899